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Experimental study of optimal parameters of pneumatic motor of vibration table for inertial vibroabrasive machining the parts on the basis of beryllium oxide(Article)

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Скрыть дополнительные организации

Краткое описание

In this paper, attention is paid to solve a number of issues related to the experimental study of the vibration table of inertial vibroabrasive processing improved by equipping it with pneumatic actuator providing rotary oscillating movement of the tool thanks to the compressed air and ejection of processed products and filtering. For each type of structural arrangement of the holes outside a series of tests were conducted with different values of the cross sectional area outside the holes and different values of supply pressure, while the other parameters were fixed. Studies were carried out to determine the optimal values of the radius of the inlet nozzle, the radius of the atmospheric hole mass of roller. For maximum performance, handling and collection of waste products and their filtering control of the geometric parameters of the air supply was performed.